

To the Federal Communications Commission:

The reconfiguration of the 902-928 MHz band to allow NextNav to establish satellite uplinks and downlinks would stifle decades of innovation and experimentation within the Amateur Radio community. The 33cm (902-928) amateur radio band, while shared with other ISM users, is one of the last frontiers for experimentation with affordable surplus commercial equipment in a relatively “quiet” band. Amateur radio operators, like myself, use the 33cm band for many purposes including, but not limited to:

- In-band repeaters for long distance communications
- Point-to-point links
- Weak signal operation and experimentation such as ‘moon bounce’
- Wide bandwidth modulation schemes such as spread spectrum
- A quiet band for communications during emergencies

I have invested thousands of dollars of personal funds to put up three repeaters in the 33cm band in my home state of Utah, with more planned. Each repeater has an extremely sensitive receiver capable of detecting signals as weak as -120 dBm (0.22μV). They are used as a place for local hams to experiment with narrow band analog voice, as well as digital modes such as DMR and P25. See included specifications and coverage maps.

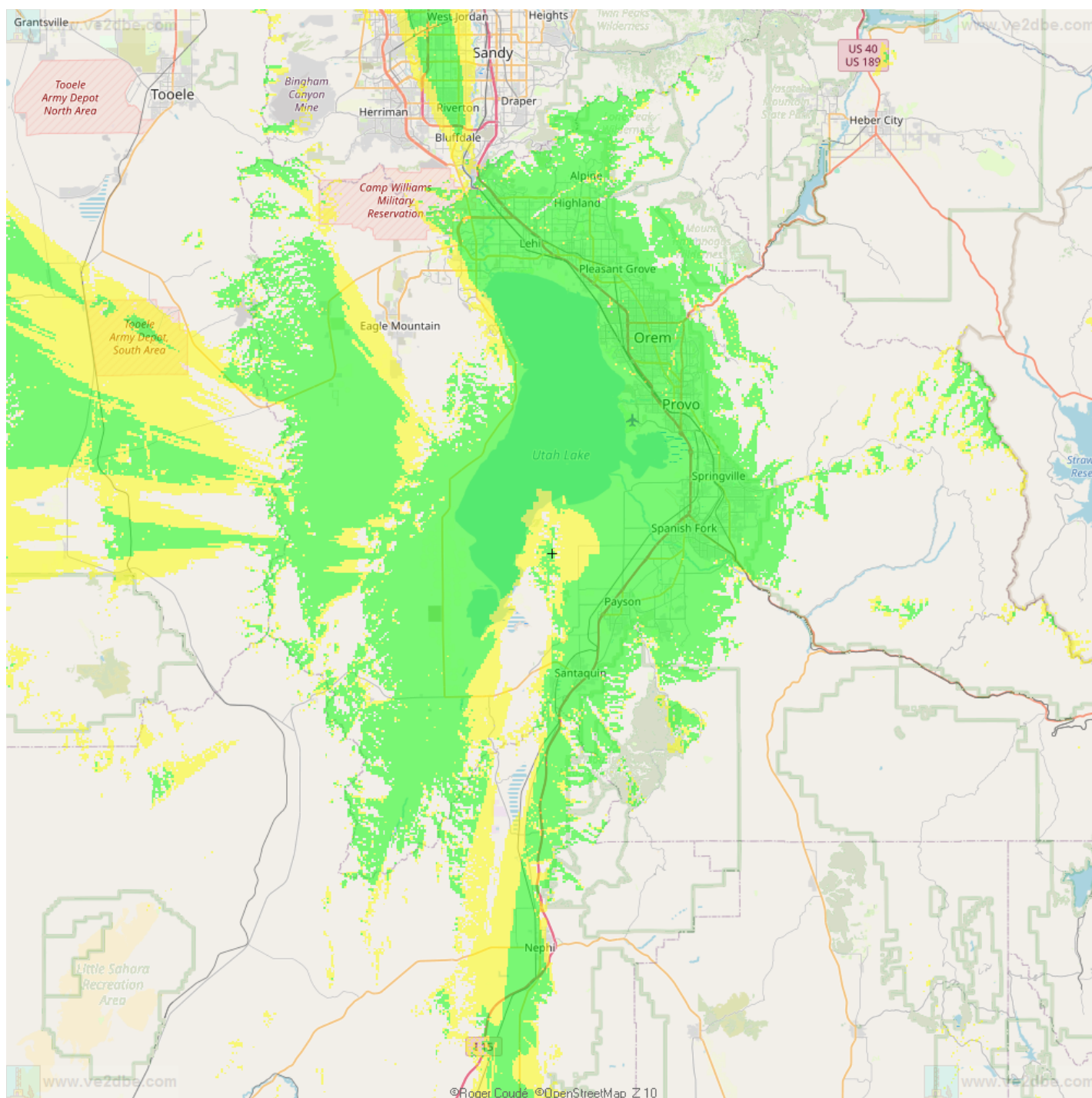
Allowing NextNav to have use of the 902-928 MHz spectrum would severely limit the effectiveness of 33cm repeaters and subscribers across the country, if not *render them useless*. Weak signal operations would be obliterated. Point to point links could deteriorate and harm communications translated to other bands. Please consider the thousands of amateur radio operators, like myself, that rely on the 33cm band as a place to experiment, communicate, and call ‘home’, while deciding on the NextNav proposal. Moving forward with the proposal would be devastating.

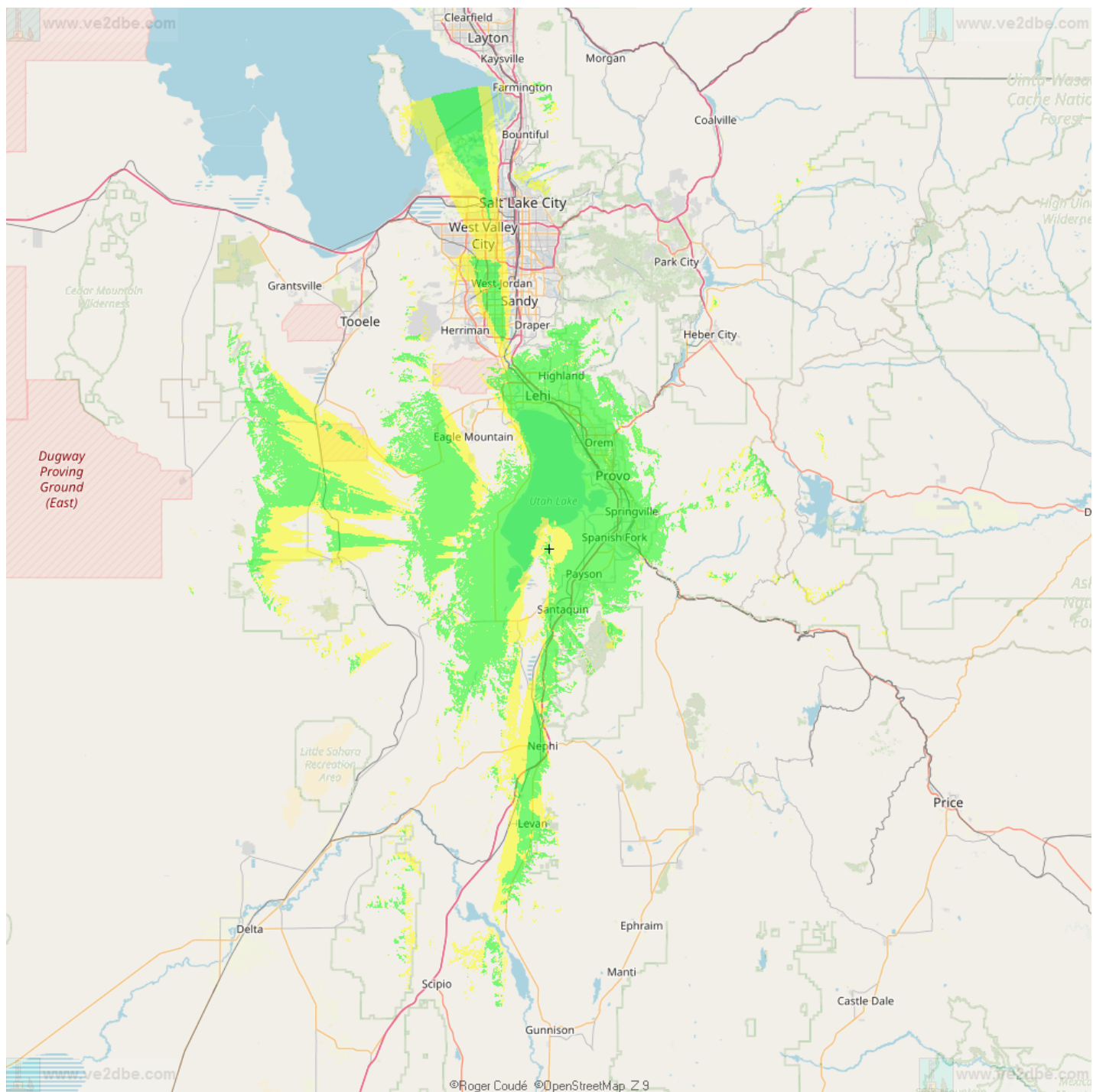
Sincerely,

Spencer Ammermon, NG6K

Radio Mobile Online Coverage report

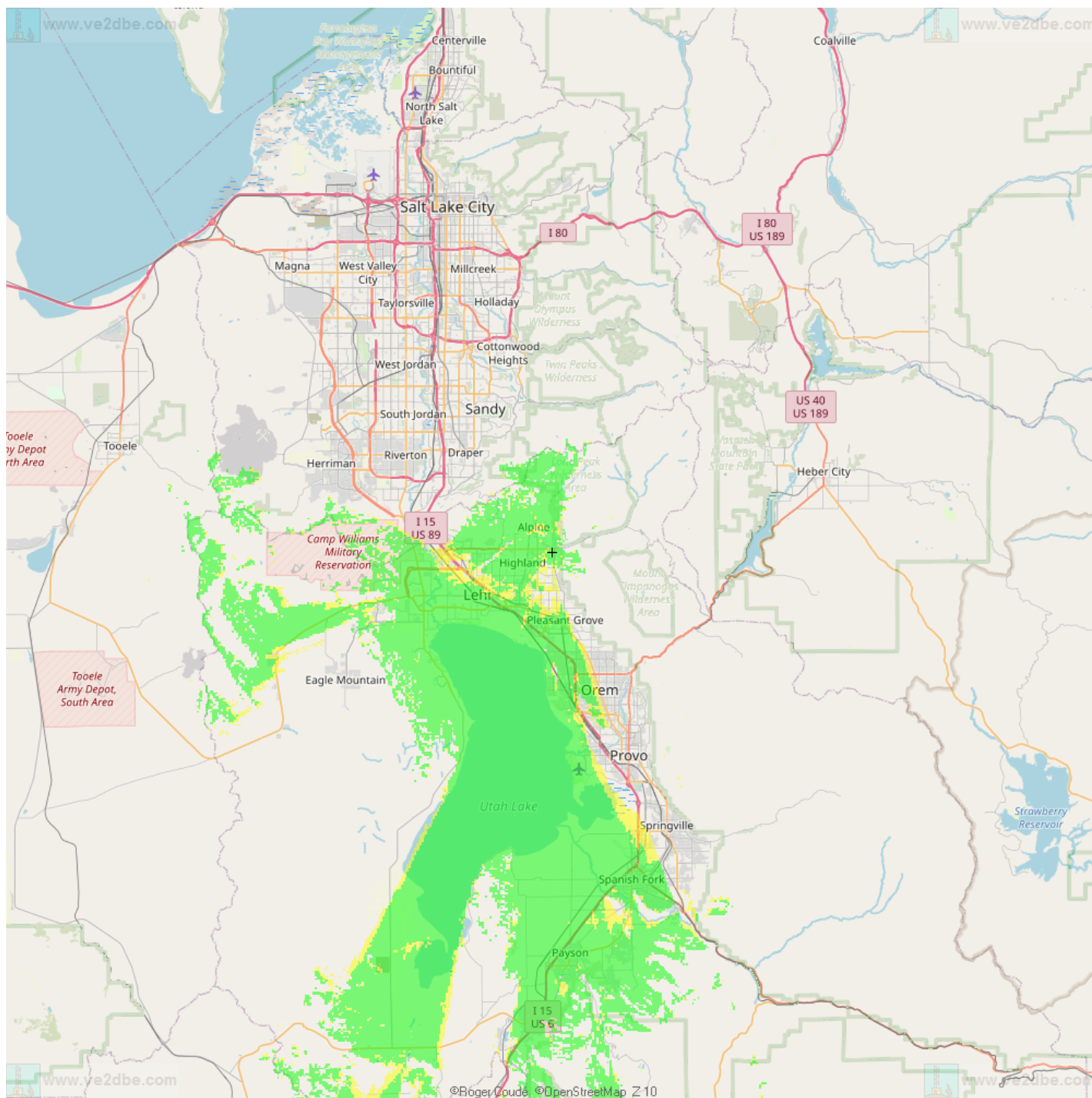
Description	West Mtn 900
Frequency	927.0125 MHz
Base Name	West Mountain
Latitude	40.09003479 °
Longitude	-111.82200395 °
Latitude	40° 05' 24.13"N
Longitude	111° 49' 19.21"W
QRA	DN40CC
UTM (WGS84)	12T E429926 N4438074
Canada Map Index	70D4
Elevation	2067.7 m
Base Antenna Height	9 m
Base Antenna Gain	5.0 dBi
Base Antenna Type	omni
Base Antenna Azimuth	0 °
Base Antenna Tilt	0 °
Mobile Antenna Height	2.0 m
Mobile Antenna Gain	2.0 dBi
Tx Power	40.00000 W
Tx Line Loss	1.5 dB
Rx Line Loss	0.5 dB
Rx Threshold	0.200 µV (-121.0 dBm)
Required Reliability	70%
Strong signal margin	20.0 dB
Weak signal field	13.6 dBµV/m
Strong signal field	33.6 dBµV/m
Weak signal covered area	4871 km ²
Strong signal covered area	3239 km ²
Weak signal population reached	657189 pop
Strong signal population reached	451620 pop
Landcover used	Yes
Two rays method used	Yes
User ID	ng6k
Radio coverage ID	RMD5F424680FC0_1
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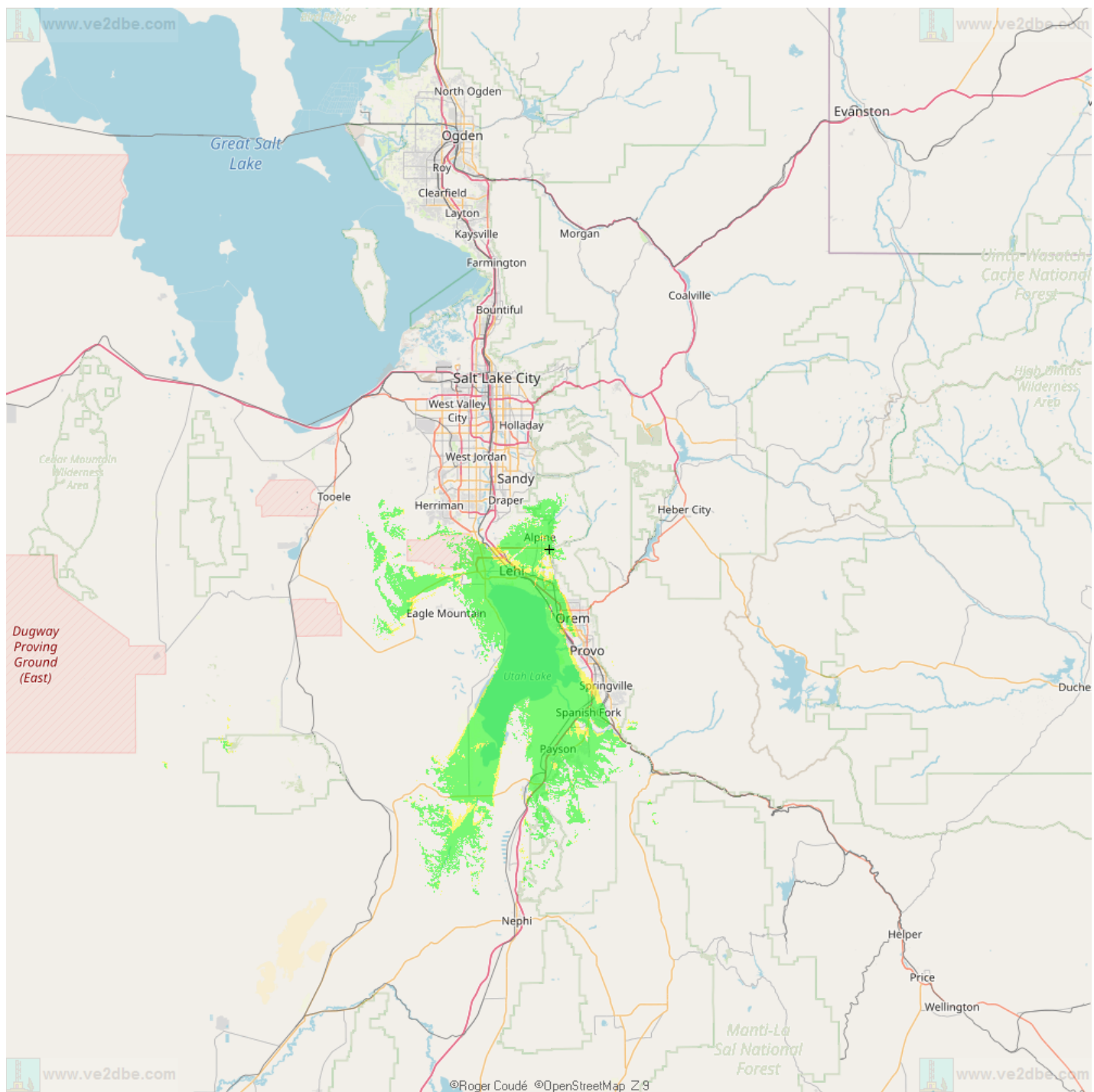




Radio Mobile Online Coverage report

Description	900 MHz repeater coverage
Frequency	927 MHz
Base Name	CedarHillsHome
Latitude	40.42835955 °
Longitude	-111.75628781 °
Latitude	40° 25' 42.09"N
Longitude	111° 45' 22.64"W
QRA	DN40CK
UTM (WGS84)	12T E435848 N4475577
Canada Map Index	70D5
Elevation	1567.4 m
Base Antenna Height	11 m
Base Antenna Gain	8.0 dBi
Base Antenna Type	omni
Base Antenna Azimuth	0 °
Base Antenna Tilt	0 °
Mobile Antenna Height	2.0 m
Mobile Antenna Gain	2.0 dBi
Tx Power	35.00000 W
Tx Line Loss	6.5 dB
Rx Line Loss	3.0 dB
Rx Threshold	0.700 µV (-110.1 dBm)
Required Reliability	70%
Strong signal margin	10.0 dB
Weak signal field	24.5 dBµV/m
Strong signal field	34.5 dBµV/m
Weak signal covered area	1608 km ²
Strong signal covered area	1452 km ²
Weak signal population reached	167562 pop
Strong signal population reached	129121 pop
Landcover used	Yes
Two rays method used	Yes
User ID	ng6k
Radio coverage ID	RMDB36373687C_0
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Radio Mobile Online Coverage report

Description	BYU 900 WSC 3
Frequency	927.0625 MHz
Base Name	BYU WSC
Latitude	40.24858091 °
Longitude	-111.64684618 °
Latitude	40° 14' 54.89"N
Longitude	111° 38' 48.65"W
QRA	DN40EF
UTM (WGS84)	12T E444986 N4455549
Canada Map Index	70D4
Elevation	1420 m
Base Antenna Height	43 m
Base Antenna Gain	5.0 dBi
Base Antenna Type	omni
Base Antenna Azimuth	0 °
Base Antenna Tilt	0 °
Mobile Antenna Height	2.0 m
Mobile Antenna Gain	2.0 dBi
Tx Power	35.00000 W
Tx Line Loss	2.0 dB
Rx Line Loss	0.5 dB
Rx Threshold	0.200 µV (-121.0 dBm)
Required Reliability	70%
Strong signal margin	20.0 dB
Weak signal field	13.6 dBµV/m
Strong signal field	33.6 dBµV/m
Weak signal covered area	2101 km ²
Strong signal covered area	1548 km ²
Weak signal population reached	354042 pop
Strong signal population reached	274834 pop
Landcover used	Yes
Two rays method used	Yes
User ID	ng6k
Radio coverage ID	RM3A78A324ECB8_0
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